

# **WATERLOO COAL GASIFICATION PLANT**

**IOWA**

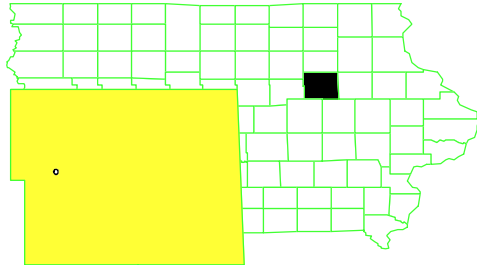
**EPA ID# IAD984566356**

**EPA Region 7**

**City: Waterloo**

**County: Blackhawk County**

**Other Names:**



## **SITE DESCRIPTION**

The former Waterloo Coal Gasification Plant manufactured gas for lighting and heating purposes from 1901 to 1956 in Waterloo, Blackhawk County, Iowa. When operational, the coal gasification operation occupied approximately 4 1/2 acres. The majority of the site is located along the Cedar River, south of Sycamore Street between Union and Elm Streets. A railroad right-of-way runs through this portion of the site. Plant diagrams also indicate that an area located north of Sycamore Street and east of Union Street housed gas holders. During the time period that operations occurred, several power companies held title to the parcels that comprise the site. Since the discontinuation of operations in 1956, certain parcels have been sold to public and private parties. The majority of the site is presently owned by a utility company, MidAmerican Energy Company. The plant was dismantled between 1964 and 1967. Two waste streams generally associated with manufactured gas plant sites are of primary concern: coal tar residuals from the gasification process and cyanide residuals from the purification process. Exact disposal methods for these wastes are unknown; however, initial investigations indicate soil and groundwater contamination. The nearest downgradient bedrock wells servicing Waterloo and nearby Evansdale are located 1 3/4 miles south and 3 miles southeast of the site, respectively. Approximately 74,800 people obtain drinking water from public and private wells located within a 4-mile radius of the site. The Cedar River is used for recreational activities and wetlands are located downriver of the site.

### **Site Responsibility:**

The site is being addressed through Federal and potentially responsible parties' actions.

### **NPL LISTING HISTORY**

**Proposed Date:** 10/14/92

**Final Date:**

**Deleted Date:**

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## THREATS AND CONTAMINANTS

**Description:** Polycyclic aromatic hydrocarbons (PAHs), benzene, ethylbenzene, toluene and xylene (BETX compounds) and cyanide have been detected in on-site surface and subsurface soils. PAHs, BETX compounds and cyanide have also been detected in shallow groundwater samples collected from on-site monitoring wells. Accidental ingestion of or direct contact with contaminated soil or groundwater may pose potential health threats to individuals. The potential for adverse impacts on wetlands and associated wildlife due to contaminant migration from the site to the Cedar River also exists. However, limited surface water and sediment samples collected in the Cedar River as part of the Remedial Investigation/Feasibility Study (RI/FS) indicate non-detect to very low concentrations of PAHs and non-detect concentrations for BETX and cyanide.

## CLEANUP APPROACH

### Response Action Status

**Initial Actions:** MidAmerican Energy, the potentially responsible party, has performed work pursuant to a 1993 Administrative Order on Consent (AOC). Removal activities required by the 1993 AOC were initiated in August 1994 and include excavation of coal tar, visibly coal-tar-impacted soils, and coal-tar-impacted materials. A total of 12,000 tons of contaminated material were excavated in 1994, 1995 and 1996 during Phase I of the removal action. This excavated material was processed on-site and transported to the George Neal Power Generation Station at Sioux City, Iowa for incineration. The removal action was initiated to mitigate potential impact to groundwater by coal tar and coal-tar-impacted materials and to remove hazardous substances in soils at or near the surface. In December 1997, a thermal desorption unit was located at the site and an additional 14,000 tons of contaminated soil from the Waterloo Coal Gas site was thermally treated from December 1997 to February 1998, during Phase II of the removal action. The thermal desorption unit was also used to thermally treat coal-tar impacted soils transported from former manufactured gas plant (FMGP) sites located in Charles City, Hampton, Independence and Waverly. These FMGP sites are being addressed by MidAmerican Energy under the supervision of the Iowa Department of Natural Resources. The thermally treated soil was used as backfill at the Waterloo Coal Gas site. The removal activity will be completed following the addition of topsoil and subsequent revegetation of the site.

**Entire Site:** MidAmerican Energy has also performed work pursuant to a 1995 AOC that requires a Remedial Investigation/Feasibility Study (RI/FS). Activities conducted to date include surface and subsurface soil sampling, river sediment sampling, installation and sampling of piezometers and groundwater monitoring wells. The RI/FS will determine the nature and extent of

contamination and be used to develop and evaluate alternatives for remedial action. The RI/FS is scheduled to be completed in 2000.

**Description:**

**Site Facts:** EPA and Midwest Gas signed an Administrative Order on Consent (AOC) on December 29, 1993 to perform removal actions at the site. In addition, the EPA and Midwest Gas signed an Administrative Order on Consent on May 30, 1995. The 1995 AOC requires Midwest Gas to conduct an RI/FS to determine the nature and extent of contamination in groundwater and soil.

## ENVIRONMENTAL PROGRESS



The excavation and removal of source material at the Waterloo Coal Gasification Plant site are protecting human health and the environment while the RI/FS is being conducted.

## SITE REPOSITORY



Waterloo Public Library  
Information Department  
415 Commercial  
Waterloo, Iowa 50701

Superfund Records Center  
901 N. 5th St.  
Kansas City, KS 66101  
Mail Stop SUPR  
(913)551-4038

## REGIONAL CONTACTS

**SITE MANAGER:**

**E-MAIL ADDRESS:**

James Colbert  
colbert.james@epamail.gov.  
(913) 551-7489

**COMMUNITY INVOLVEMENT**

**COORDINATOR:**

**PHONE NUMBER:**

Diane Huffman

(913) 551-7544

**PUBLIC INFORMATION CENTER:**

**E-MAIL ADDRESS:**

1-800-223-0425

**STATE CONTACT:**

**PHONE NUMBER:**

## MISCELLANEOUS INFORMATION

**STATE:**

**PACIFIC ISLAND(S):**

07EM

**CONGRESSIONAL DISTRICT:**

02

**EPA ORGANIZATION:**

SFD-IANE/SUPR

## MODIFICATIONS